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Docket No. F-6560

Ser. No. 09/594,389

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) An input apparatus for game systems comprising:

an operation member adapted to receive a load; and

a plurality of detection units arranged such that said operation member is supported by said detection units at a plurality of points around an outer circumference thereof of said operation member with a space being formed under a center of said operation member,

each of said detection units being capable of outputting a predetermined detection signal in response to changes in load in a predetermined direction in relation to said operation member,

each of said detection units including a sensing element and a coating member made of elastic material, said coating member coating said sensing element and functioning as a medium to transmit the load applied to said operation member to said sensing element,

said sensing element including one pair of elongate electrode plates arranged to contact or separate from each other according to the load,

said coating member including a protrusion for limiting a position to which the load toward said sensing element is transmitted, said protrusion being

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shifted from both longitudinal ends of said electrode plates into a central side thereof
of said electrode plates and supporting said operation member, said coating member
being arranged to contact said operation member and support said operation member
in the predetermined direction.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The input apparatus of claim 1, wherein
said protrusion is arranged on an outer surface of said coating member.

5. (Previously Presented) The input apparatus of claim 1, wherein
said protrusion is arranged on an inner surface of said coating member.

6. (Previously Presented) The input apparatus of claim 1, further
comprising a stopper for limiting displacement of said operation member in relation
to the predetermined direction in a certain range.

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7. (Previously Presented) The input apparatus of claim 6, wherein said operation member is formed into a panel, and said stopper is located closer to a center of said operation member than said detection unit.

8. (Previously Presented) The input apparatus of claim 7, wherein said stopper adjoins said detection unit.

9. (Currently Amended) An input apparatus for game systems comprising:

a base having a plurality of panel-attaching sections;

an operation member arranged at each of said panel-attaching sections

and adapted to receive a load;

a plurality of detection units arranged at each of said panel-attaching sections such that said operation member is supported by said detection units at a plurality of points around an outer circumference thereof of said operation member with a space being formed under a center of said operation member;

a plurality of stoppers for limiting an amount of pushing operation toward said operation member,

said stoppers being arranged entirely inward compared to said plurality of detection ~~unit~~ units in relation to said operation member,

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each of said detection units being located between a panel-supporting surface formed on each of said panel-attaching sections and said operation member and being capable of outputting a predetermined detection signal in response to changes in pushing load applied to said operation member,

each of said detection units including a sensing element and a coating member made of elastic material, said coating member coating said sensing element and functioning as a medium to transmit the load applied to said operation member to said sensing element,

said coating member being arranged to contact said operation member and support said operation member.

10. (Canceled)

11. (Previously Presented) The input apparatus of claim 1, wherein said operation member is a foot panel on which a player is able to stamp.

12. (Previously Presented) The input apparatus of claim 1, wherein said electrode plates comprise a pair of opposed metallic plates and said sensing element further comprises insulating means for separating said metallic plates from one another, said coating member being arranged to overlie an upper one of said metallic plates and lie below a lower one of said metallic plates.

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13. (Previously Presented) The input apparatus of claim 1, wherein said coating element defines an interior cavity, said sensing element being arranged in said cavity.

14. (Currently Amended) A foot switch for an input apparatus for game systems comprising:

a frame defining a support surface;

at least one detection unit arranged on said support surface of said frame and to output a detection signal in response to changes in a load applied in a predetermined direction, each of said at least one detection unit comprising a sensing element and a coating member made of elastic and surrounding said sensing element, said sensing element including a pair of elongate electrode plates arranged to contact or separate from each other according to the load, and said coating member including a protrusion for limiting a position to which the load toward said sensing element is transmitted, said protrusion being spaced from both longitudinal ends of said electrode plates; and

an operation member adapted to receive a load and arranged in contact with said coating member of said at least one detection unit such that said coating member supports said operation member on said frame and transmits the load received by said operation member to said sensing element.

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15. (Previously Presented) The foot switch of claim 14, wherein said electrode plates comprise a pair of opposed metallic plates and said sensing element further comprises insulating means for separating said metallic plates from one another, said coating member being arranged to overlie an upper one of said metallic plates and lie below a lower one of said metallic plates.

16. (Previously Presented) The foot switch of claim 14, wherein said coating element defines an interior cavity, said sensing element being arranged in said cavity.

17. (Canceled)

18. (Previously Presented) The foot switch of claim 14, wherein said protrusion is arranged on at least one of an outer surface and an inner surface of said coating member.

19. (Previously Presented) The foot switch of claim 14, wherein said coating member is elongate and said protrusion extends longitudinally along said coating member, said protrusion being spaced from longitudinal ends of said coating member.

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20. (Canceled)

21. (Previously Presented) The foot switch of claim 14, further comprising at least one stopper for limiting displacement of said operation member.

22. (Previously Presented) The foot switch of claim 21, further comprising at least one sustaining plate arranged on said frame, said at least one detection unit and said at least one stopper being arranged on a respective one of said at least one sustaining plate.

23. (Previously Presented) The foot switch of claim 21, wherein said at least one stopper is arranged on an underside of said operation member.

24. (Previously Presented) The foot switch of claim 21, wherein each of said at least one stopper is arranged proximate a respective one of said at least one detection unit.

25. (Previously Presented) The foot switch of claim 14, wherein said coating member includes a plurality of separate protrusions.

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26. (Previously Presented) The foot switch of claim 14, further comprising at least one sustaining plate arranged on said frame and including a raised, stopper portion for limiting displacement of said operation member, said at least one detection unit being arranged on a respective one of said at least one sustaining plate.

27. (Previously Presented) The input apparatus of claim 9, wherein said operation member is a foot panel on which a player is able to stamp.

28. (Currently Amended) An input apparatus for game systems comprising:

an operation member adapted to receive a load and having an outer surface portion formed into a panel; and

a detection unit capable of outputting a predetermined detection signal in response to changes in load in a predetermined direction in relation to said operation member, and

a stopper for limiting displacement of said operation member in relation to the predetermined direction in a certain range,

said detection unit including a sensing element and a coating member made of elastic material, said coating member coating said sensing element and

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functioning as a medium to transmit the load applied to said operation member to said sensing element,

said coating member being arranged to contact an outer circumference of said operation member and support said operation member in the predetermined direction,

~~said detection unit being arranged to contact said outer surface portion of said operation member, and~~

said stopper being located closer to a center of said operation member than said detection unit.

29. (Previously Presented) The input apparatus of claim 28, wherein said stopper adjoins said detection unit.

30. (Previously Presented) The input apparatus of claim 28, wherein said operation member is a foot panel on which a player is able to stamp.

31. (Previously Presented) The input apparatus of claim 1, wherein said detection units are elongate.

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32. (Previously Presented) The input apparatus of claim 9, wherein said stoppers are arranged external of said detection units.

33. (Previously Presented) The input apparatus of claim 28, wherein said stopper is arranged external of said detection unit such that said operation member is in contact with said stopper upon application of the load in the predetermined direction.
